



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|--------------------------|---------------------|------------------|
| 10/565,664 | 07/14/2006 | Sai Shankar Nandagopalan | US030247US3 | 2487 |

24737 7590 09/21/2010
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

| |
|----------|
| EXAMINER |
|----------|

OBAYANJU, OMONIYI

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2617

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

09/21/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|--|--|
| Office Action Summary | Application No. 10/565,664 | Applicant(s) NANDAGOPALAN, SAI SHANKAR | |
| | Examiner OMONIYI A. OBAYANJU | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

However, the Examiner further reviewed Applicant's amendments and arguments which have been found not persuasive.

First, in regards to the Applicant's amended and/or added limitation i.e. "*in a session*" to distinguish the present claimed subject matter from the applied prior art reference.

In response the Examiner respectfully disagrees with Applicant's amendment to distinguish the present claimed invention. As clearly shown in **fig. 2 of** the prior art reference (Cimini Jr), the mobile terminals are in a session (in communication) with the access point (AP). Therefore the current amendments presented do not overcome the rejections of the prior art reference (Cimini Jr).

Second, In regards to the independent claims, the Applicant argued that the prior art reference (Cimini Jr) fails to teach at least in part the claimed limitation of "determining an allocated transmission time for each of the wireless stations based on a

Art Unit: 2617

set physical transmission rate, wherein each of the wireless stations has individually allocated transmission time based on at least the amount of data that needs to be transmitted by each of the wireless stations in a session”.

In response the Examiner respectfully disagrees with Applicant’s argument. After carefully reviewing the Applicant’s arguments, Applicant simply repeated the same and/or similar arguments which have been addressed in the previous office action mailed (05/04/2010). Therefore, for at least the same reasons stated above and/or in the office action mailed (05/04/2010), the Applicant’s argument has been found not persuasive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11, and 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Cimini, JR. et al. (US Publication No. 20030133427).

As **to claim 1**, Cimini teaches a method of providing bandwidth fairness in a wireless network that includes a plurality of wireless stations (abs, and pg. 4, pp0049, lines 7-8), the method comprising: determining bandwidth requirement (abs, and pg. 3, pp0036, lines 1-8) for a particular service interval (pg. 1, pp0005 lines 13-16) for each of the wireless stations (fig. 1b, #12a,b,c); determining an (different, fig. 5) allocated transmission time for each of the wireless stations based on a set physical transmission rate (pg. 3, pp0034 lines 14-16, and pp0037, lines 1-9), wherein each of the wireless stations has individually allocated transmission time based on at least the amount (size of packet) of data that needs to be transmitted by each of the wireless stations in a session(fig. 2, and fig. 10, pp0057-pp0060); and fragmenting a packet by at least one of the wireless stations if the at least one wireless station transmits at a transmission rate that is lower than the set physical transmission rate (pg. 5, pp0060, lines 1-4 and pp0048, lines 13-15).

As **to claim 2**, Cimini teaches wherein the allocated time for each of the plurality of wireless stations is the proportional to the quantity of data to be sent by the respective stations (abs) during a service interval (pg. 1, pp0005 lines 13-16).

As **to claim 3**, Cimini teaches wherein for each of the at least one wireless station a number of the fragments is equal to the set physical transmission rate divided by the lower transmission rate (pg. 4, pp0042 lines 7-11).

As **to claim 4**, Cimini teaches wherein the allocated transmission time is equal to the total data of all packets generated in the beacon interval divided by the set physical transmission rate (pg. 4, pp0049).

As to **claim 5**, Cimini teaches wherein the wireless network is a multiple physical transmission rate wireless network (pg. 2, pp0030, lines 5-10).

As to **claim 6**, Cimini teaches wherein the wireless network is a Generalized Packet Radio Service (GPRS) network (pg. 1, pp0003, lines 11-12, Transmitting data at different transmitting rate is equivalent to (GPRS) network).

As to **claim 7**, Cimini teaches wherein the wireless network is a Wireless Local Area Network (WLAN) (pg.1, pp0003, line 1).

As to **claim 8**, Cimini teaches wherein each of the at least one wireless stations transmits all remaining fragments after all wireless stations that transmit at the set physical transmission rate have completed transmitting their packets (pg. 5, pp0062, lines 1-5).

As to **claim 9**, Cimini teaches further comprising maintaining a particular quality of service QoS for each of the wireless stations that maintain transmission at the set physical transmission rate during a service interval (pg. 3, pp0037 lines 8-15).

As to **claim 10**, Cimini teaches wherein each of the at least one wireless stations transmits all remaining fragments (fragments equivalent to packet) until its physical transmission rate is greater than the set physical transmission rate (pg.5, pp0057, lines 1-7).

As to **claim 11**, Cimini inherently teaches similar limitations in the method of claim 1 as discussed above.

As to **claim 14**, Cimini teaches wherein the number of fragments is equal to the lower transmission rate divided by the set transmission rate (pg. 4, pp0042 lines 7-11).

As to **claim 15**, Cimini teaches wherein the transmission time is equal to the total data of all packets generated in the beacon interval divided by the set physical transmission rate (pg. 4, pp0049).

As to **claim 16**, Cimini teaches wherein each of the plurality of wireless stations is adapted to transmit at multiple physical transmission rates (pg. 2, pp0030, lines 5-10).

As to **claim 17**, Cimini teaches wherein the wireless network is a Generalized Packet Radio Service (GPRS) network (pg. 1, pp0003, lines 11-12, Transmitting data at different transmitting rate is equivalent to (GPRS) network).

As to **claim 18**, Cimini teaches where the wireless network is a Wireless Local Area Network (WLAN) (pg.1, pp0003, line 1).

As to **claim 19**, Cimini teaches wherein a particular quality of service (QoS) is maintained for each of the plurality of wireless stations that transmit at the set physical transmission rate for the entire service interval (pg. 3, pp0037 lines 8-15).

As to **claim 20**, Cimini teaches wherein each of the wireless stations that change their transmission rate to a lower transmission rate than the set physical transmission rate during the service interval (pg. 1, pp0005 lines 13-16) send their remaining fragments after all wireless station that transmit at the set transmission rate have completed transmission of their respective packets (pg. 5, pp0062, lines 1-5).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2617

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMONIYI A. OBAYANJU whose telephone number is (571)270-5885. The examiner can normally be reached on Mon - Fri, 7:30 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. A. O./
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art
Unit 2617